

## Inner Rotor Type Brushless Motor

# BY54

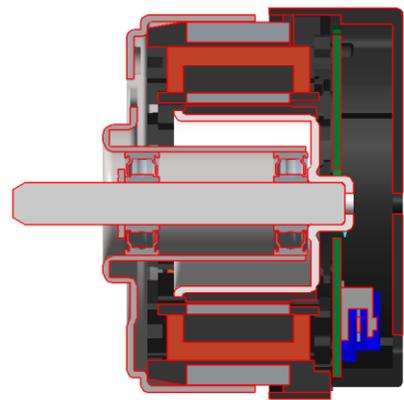
High Performance

High Quality

### Features

- ✓ High Efficiency (Max80% Rated75%)
- ✓ Low Noise
- ✓ Stable Rotation
- ✓ Quick Start
- ✓ Built-in Driver

MADE IN JAPAN



### Application

#### Medical Devices

- ◆ Dialysis System
- ◆ Lab Automation
- ◆ Medical Pumps etc

#### Cash Handling Machines

- ◆ ATM
- ◆ Banknote Conveying Devices etc

#### Home Appliances

- ◆ Fans
- ◆ Pumps etc



#### Housing Equipment

- ◆ Electric Blinds
- ◆ Shelf Elevator etc

### Specification

Type	Inner rotor type brushless motor
Rated Output	31.2W(1Kgfc $\cdot$ m/3000rpm)
Outside Dimensions	$\Phi$ 54mm $\times$ L41mm
Built-in Circuit	3 types
Rotation Detection	FG pulse 36P/R

## Features

### ① Straight Core/Core Molding

- Straight core
- Thin-walled insert-forming core mold
- Curling/welding
- Regular winding

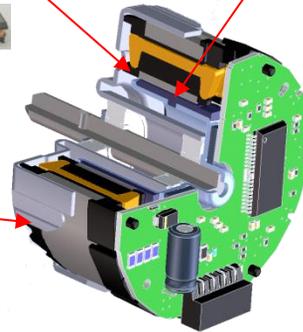


### ② One-piece deep drawn process for the motor case

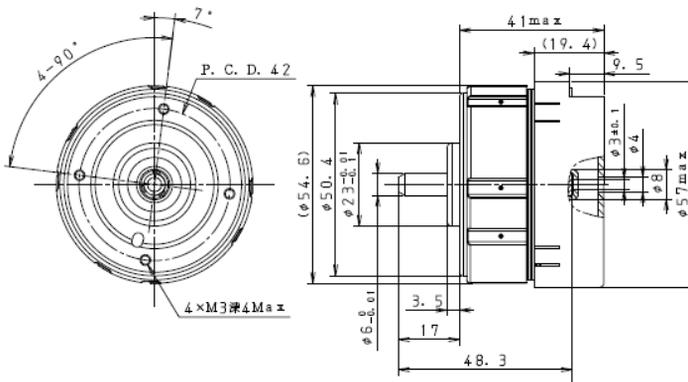


### ③ Neodymium Plastic Magnet Forming

- Neodymium plastic magnet injection/insert forming



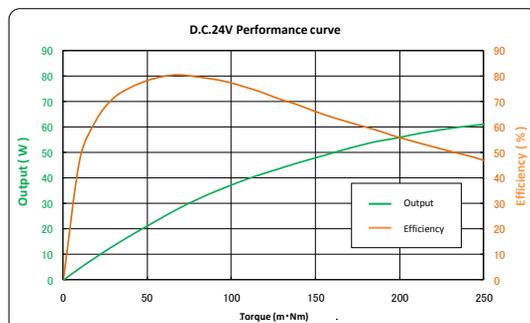
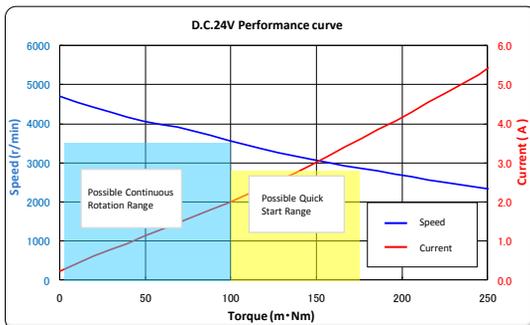
## Dimensions



## Drivers

- ① External Control (1-5V)
- ② External Control (PWM)
- ③ Speed Control (CLKin)
- ※ Possible without a driver

## Specification



P/N	BY54
Rated Output	31.2(W)
Rated voltage	24(V)
Rated Speed	3300(rpm)
Max. Continuous Current	2(A)
Max. Continuous Torque	100(mN · m)
Torque Constant	55(mN · m/A)
Mechanical Time Constant	8.6(ms)
Electrical Time Constant	1.8(ms)
Rotor Inertia	52(g · cm <sup>2</sup> )
Thermal Resistance	5.4(°C/W)
Inductance	1.8(mH)